Asian Crisis Four Years Later and Its Implications for Emerging Market Economies

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Andrzej K. Koźmiński: Welcome Ladies and Gentlemen. I am particularly pleased and honored to welcome today Professor Mario Blejer from the IMF. Professor Blejer will talk today about the Asian crisis four years later and its implications for emerging markets. The topic may seem distant from us, here in Poland, but as you will probably see, it is not necessarily true. In fact, it has a very direct impact on us. The lecture is in the general framework of the Distinguished Lecture Series at the Koźmiński Academy. Professor Robert Mundell, Nobel Prize Winner, delivered the first lecture in the Series. Professor Vito Tanzi from the IMF gave the second lecture. He talked about the impact of the 'new economy' on taxation. Professor Mario Nuti gave the third lecture, which has not been published yet. Today we will listen to the distinguished Professor Blejer. This lecture is a part of an "incuBATor of Knowledge" sponsoring program. I am now turning the floor over to Professor Kolodko, the Director of TIGER economic think-tank, to talk about our guest today and the undertaking of the "incuBATor of Knowledge".

Grzegorz W. Kolodko: Thank you, Professor Koźminski. I would like to welcome again Professor Blejer, the next distinguished guest in our Koźmiński Academy Distinguished Lectures Series and the "incuBATor of Knowledge" sponsored by BAT. Professor Koźmiński already mentioned that Professor Mundell, the Chairman of the TIGER Scientific Advisory Board, was the first speaker in the Series. Professor Vito Tanzi was the second speaker. One may read on the first page of the Financial Times that Vito Tanzi is taking over as the Secretary of Treasury of the new Italian government. Professor Mundell will be in two weeks, again, a distinguished lecturer giving the keynote address to the forthcoming European Congress of the European Foundation for Management Development (EFMD) held this year by the Koźmiński Academy. Professor Nuti, the third speaker, is commuting between London and Rome, teaching at London Business School and the University of Rome "La Sapienza". I may say that the previous speakers in this series were pretty good, and I am sure that it will also be the case with Professor Blejer. After having such a splendid professional career there is yet one more important contribution to Professor Blejer's C.V. - a Distinguished Lecturer at the Koźmiński Academy. Indeed, the career of Professor Blejer, whom I have had the privilege to know for over twelve years, is an exceptional one. Currently he is the Senior Advisor at the Asian and Pacific Department at the IMF and the Senior Advisor at the Monetary Exchange Affairs Department. Having already began his career at the IMF in 1980, during his tenure he has been involved in a wide range of issues, including work on the effectiveness of the Fund's stabilization programs, fiscal and financial policies and economic reforms. He was chief of the Fund's fiscal status division and was senior advisor at the Monetary and Exchange Affairs Department. Profesor Blejer also worked as head of the Macro-Economic Division of the World Bank in the early 1990's. Incidentally that is where we became in close touch. He was in charge of the preparation of the monetary and financial section of the joint study of the Soviet economy produced together by the IMF, World Bank, OECD, and the EBRD in 1990. Professor Blejer received his Master's degree from the Hebrew University in Jerusalem and his Ph.D. from . . . guess where? From University of Chicago. Not all of these IMF guys are from Harvard! He worked at the Center for Monetary Studies in Mexico. Of course, he is fluent in Spanish and has taught at Boston Univeristy, New York University and the Graduate Institute of International Studies in Geneva. Until recently he has held the Walter Rathenau Chair in Economics at the Hebrew University of Jerusalem. He has also served as a consultant with the Inter-American Development Bank. Currently Professor Blejer maintains visiting professor appointments at the Center of European University in Budapest, and at the Universidad de San Andres in Buenos Aires. He was born in Cordoba, Argentina. He is also a member of the Board of Editors at the European Journal for Political Economy. As you may guess, Professor Blejer has written and published a series of excellent papers and books. A great number of books have also been edited and co-edited by Professor Blejer. A number of that are the outcomes of the famous annual conference related to transitional and financial markets and polices held annually in Dubrovnik, Croatia. The next book of this conference also has contributions from Tanzi, Mundell, Blejer and many other scholars. There is also a chapter written by myself that is due to be published later this year by the MIT University Press. Today Professor Blejer will talk on a very interesting topic, though seemingly distant from our position in Poland. The title of the lecture today is "The Asian Crisis Four Years Later and the Implications for Emerging Market Economies" As we know there is still a lot of debate about what are the costs of the Asian financial crisis and what was the real sphere of crisis in the 1970's. What was the mechanism? What was the set of causes leading to the so-called ‘contagion effect’? Spreading the crisis all around the world, in a sense of how the contagion has been transmitted throughout the global financial markets to other parts of the global economy, the so-called emerging markets included.

Professor Blejer, being a distinguished economist and very knowledgeable researcher, also works for a very special institution - the IMF. The Fund has had its say in the process of the handling of the East Asian currency crisis and in the aftermath of this crisis. Here we have different viewpoints. Some say that the IMF did pour a little bit of oil to the fire that was already there. Hence, a few people place some of the blame on the IMF for the mishandling of the East Asian crisis. There are others, who are claiming that everything from the side of this important institute was handled properly. It is not too difficult to figure out that those people are the professionals from the IMF. So I hope that today we will learn how the situation looks four years later. What is the aftermath of the crisis? What are the outcomes, results? In the real world, but also in economic thinking, what has caused this problem, and what have we learned? In many emerging markets, including the post-socialist East European markets we were able to avoid that type of crisis. The crisis that had driven a certain number of East Asian economies into deep contraction and has imposed a sort of social hardship on the people there. I hope that today’s presentation, Professor Blejer’s lecture, the discussion, questions, answers and comments will contribute still further to our understanding of these processes. First of all, I hope it will help us to search and continue the quest for the theory that will explain why things happened the way they did. I hope our discussion today will give us some suggestions or advice on how we can handle appropriate policies to avoid this type of crisis in the future, anywhere, but especially in the emerging markets of the post-socialist region, most importantly, though, in our Poland. Again I would like to thank Rector Koźmiński for rendering this lecture possible and for being the generous sponsor for this Series. I would also like to thank the “incuBATor of knowledge” sponsored by BAT. We will continue this Series now with Professor Blejer as the fourth speaker.

I will also announce that many of our students are passing their exams so they can not be with us today. But we will continue the Distinguished Lecture Series at the Kozminski Academy after the summer break. In October we will host here Donald Johnson, the Secretary - General of the OECD. Then in mid-November, we will host Janos Kornai of Harvard University and the Hungarian Academy of Sciences. But today, the floor is going to the distinguished Professor Mario Blejer of the IMF.

Mario I. Blejer: Thank you very much. First of all I would like to thank very much Professor Koźmiński and Professor Kolodko for their words, and would like to thank the Koźmiński Academy for their invitation for me to come to Warsaw. As a matter of fact, I have traveled quite a lot in this region and in Europe and the former Soviet Union. Though I actually had a chance to visit Poland before I, however, did not use it. This is why today's lecture is an important opportunity to visit Poland and I want to thank the sponsors for inviting me here.

The subject of my talk is, as was mentioned, "The Asian Crisis Four Years Later and Its Implications for Emerging Market Economies". I will discuss in detail the reasons and the causes of the crisis, the aftermath, the consequences, and how this was handled. I would like to get straight to the point of the implications for all emerging markets as well as all implications for the rest of the financial community. I will try to get there in enough time to be able to discuss your questions. Let me just say, that whatever I say is basically my own view, and the result of my own research, and does not reflect in any particular way the views of the IMF on the subject. One of the reasons that it does not reflect the views of the IMF is that I am not speaking here in an official capacity; the other reason is that there is not such a thing as a very clear view of the IMF. There are different views in the IMF about this process. And different views about this debate as Professor Kolodko referred to, that is, the debate about how the Asian crisis was handled. So the idea that the IMF has a monolithic view of this crisis is not correct. I seriously want to make clear that what ever I discuss is my own view, not the IMF's.

Allow me to just mention what are the issues that I want to cover. As the handouts show, I would like to divide the issues into four parts. First I want to discuss the impact and the origins of the crisis. I think that in order to understand what happened it is important to understand the origins and the underpinnings of the crisis. Then I would like to discuss in some detail the adjustments and the recovery. In terms of the origin of the crisis, we can speak here for hours, but I would like to go quite fast. But I think it is very important, because that is what makes the Asian financial crisis special. I will talk about the adjustments and the recovery, what was done to bring back the economy to the point of where it was before the crisis. I will also cover the Asian situation after four years. I would also like to discuss the long-term implications of the crisis for emerging markets. What were the consequences of this financial crisis that started in July 1997? Though it is not too clear when it ended. In fact it has not quite ended for some countries, Indonesia particularly. So these are the subjects I want to discuss, which all add up to the title of my lecture, again, “The Asian Crisis After Four Years Later and the Implications for Emerging Market Economies.”

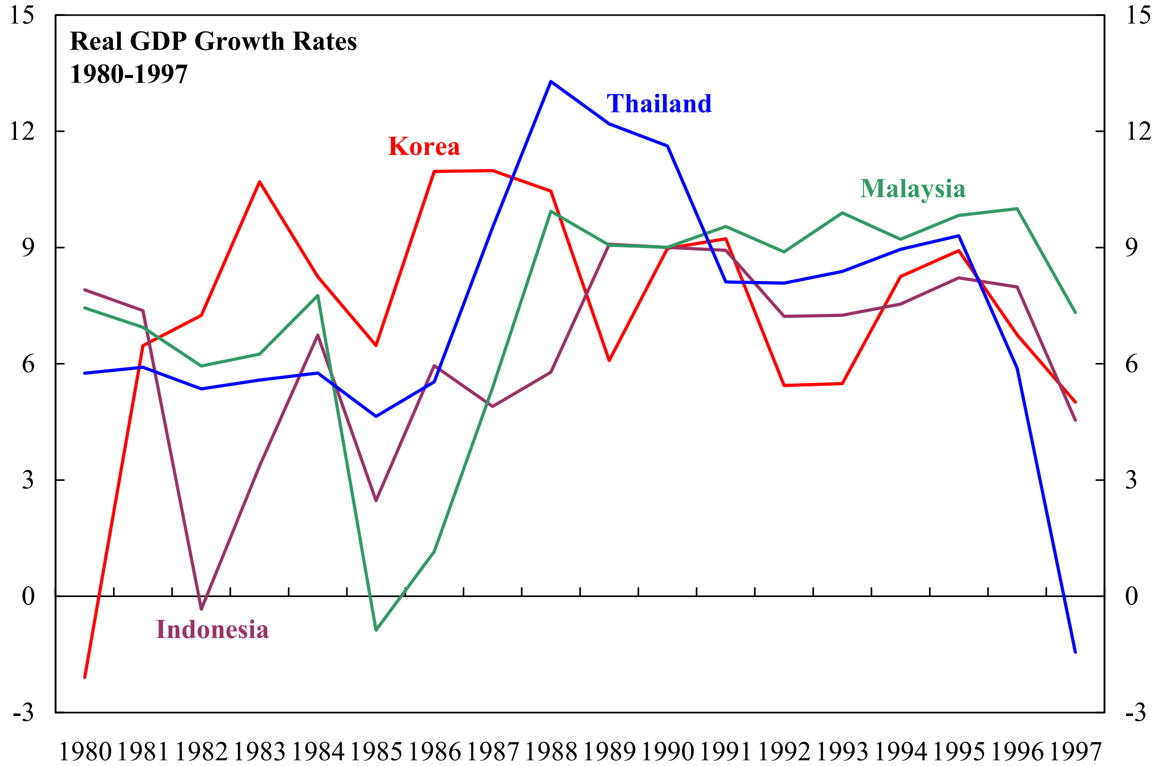
Let me start with the origins and the reasons for the crisis. Before I discuss the specifics of the crisis, I would like to illustrate an analytical framework in which we might understand the Asian crisis. Many of you here know that probably after the Mexican crisis (the so-called Tequila crisis), and to some extent also after the EMU crisis in Europe (devaluations all across Europe in the early 1990’s) it became very fashionable to discuss what are the causes for financial, exchange and currency crises. Before there were different schools of thought: the first and the second generation. The basic idea continues to be that there are basically two sources of financial crises. One is what you call the first generation school of though, which states that a financial crisis will take place if the macroeconomic framework and fundamentals are not in order. That is, if the balance of payments is not in order, if the fiscal and monetary policies are not consistent with the exchange rate policy, and so on. If the fundamentals are not in order you will have a crisis. It seems to be quite clear.

The second theory holds (I am now referring to the macroeconomic disequilibrium) that you might not see that the crisis or panic is caused by macroeconomic imbalance. Rather there is something wrong in the mixture of fiscal and monetary policy that causes economic agents to panic, to try to get out of the country, which spurs abrupt flight of capital. The panic can be auto-generated, but nevertheless it can start a contagion of the crisis. The fact that there is a fear that there will be devaluation, that there will be default, causes everyone to run to the door. Basically there is the idea that someone can scream from the back of a bus, “there is fire here”, and everyone will run to the door. There is no fire, but they all run to the door and there is a crisis. So these are the two views that have been predominant. The question is what happened in Asia: was it a crisis of the first type of macroeconomic imbalance or was it the panic-induced crisis of the second type?

The reason why there is this discussion of the Asian Crisis (which started in July 1997) is interesting and important, because the crisis affected most of the Southeast Asia, Korea, Thailand, Indonesia, Malaysia, the Philippines, Hong Kong, Singapore and, to a lesser extent, even China and India. In Asia, before the crisis took place, people used to talk about the “Asian miracle”. The economies were in balance, seemed to be growing fast, and everything appeared to be developing. These economies were even seen as a sort of a model for other developing and emerging countries on how to proceed with economic polices - so everything seemed to have been in order.

From the macroeconomic point of view, there was rapid growth, low inflation, and low fiscal deficit. Because of the apparent economic health before the crisis, people felt that auto-generated investor panic must have been the main cause for the detonation of the crisis. It is not necessarily true that if you are in balance at the macroeconomic level then you are going to be able to avoid a crisis. This is the point that I would like to deal with immediately. But let us just see some numbers, which illustrate that in terms of economic growth some Asian countries were registering quite impressive growth rates.

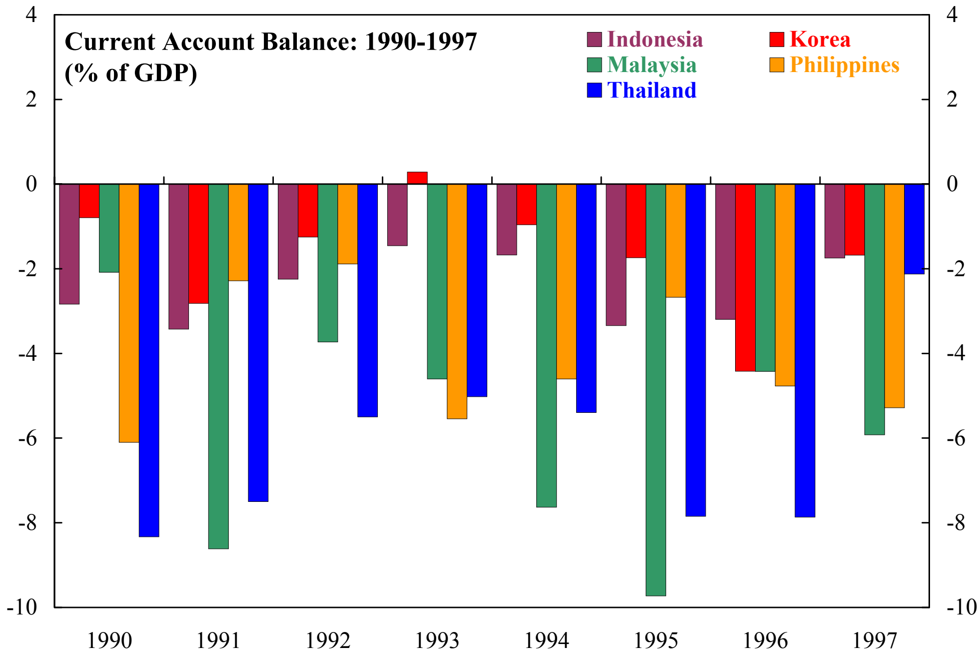
Figure 1: Real GDP growth rates 1980-1997 (in per cent):



Indonesia, Korea and Thailand, the three economies that really suffered from the crisis, from 1991 until 1997 were growing, on average, more than seven percent a year. Which is, I think, a very high rate of growth. You can see the annual rate of growth and the fall in 1997. You can see that except for large swings, from 1980 onwards the rate of growth for these countries was spectacular. In the case of Thailand, you can see the spike there at the end of the 80's when the economy grew about 12%. So the rate of growth was really spectacular.

It is then true that at least from the point of view of the economic growth, the Asian economies seemed to be very healthy. But these economies had one area of imbalance - that was the external side, the balance of payments. These economies were having a current account deficit over most of the period. You can see it in the following figure:

Figure 2: Current Account Balance of Asian Economies 1990-1997:



Basically all the countries were having relatively large current account deficits. So there was an external imbalance. That is the first point to keep in mind. These economies were growing fast, they had fiscal and monetary balance, and the exchange rate was apparently in order. But they had an external current account imbalance, which was largely financed by foreign investments. But in principle they had an external imbalance.

Therefore, the working hypothesis here is, that the economies were in balance, but there was an external force, some sort of contagion, some sort of irrational behavior, some sort of bubble that burst. But there was a financial imbalance on the balance of payments side. So the hypothesis here is, that in fact one has to distinguish between macroeconomic imbalance, in terms of macroeconomic polices (fiscal, monetary, etc.), and financial imbalance, problems or disequilibrium in the financial sector (including the corporate sector). The Asian crisis proved this distinction, which the literature only now starts to claim very clearly at a theoretic and analytic level. It is important to distinguish between these two things. This is the point that I want to make - although there was overall macroeconomic equilibrium, there was, however, also a very serious weakness in the financial sector, financial sector imbalance, that greatly increased the vulnerability of the economy and the propensity of the system to fall into a crisis. So this is, I would say, the most important working hypothesis here. We have to distinguish between financial imbalances and macroeconomic imbalances. The economy could have a surplus in the fiscal account, the central bank could have completely balanced monetary policies that match the rate of growth of money in demand. But the financial sector, including the corporations, could be seriously imbalanced. So what is financial imbalance? How are they reflected? When we talk about financial imbalances, what are we talking about? There are four issues that I would like to mention. Four issues that basically characterize and give a very clear view of the fact that although the economies were in balance at the macro level, there were serious problems at the financial level.

First of all, the financial sectors themselves, the number of banks, and the number of financial intermediaries grew very rapidly. Also the rate of credit expansion in the economy grew very rapidly. There is a very popular view in the literature that regardless of everything else, whenever you see the rate of credit in an economy in real terms growing very fast, that is a sure predictor of trouble. Later we will see why. So that is the first thing: the growth in the number of institutions, and the amount of credit.

The second sign or characteristic of imbalance was a large dependency on external capital flows. Asian economies needed large external capital flows because there was an external imbalance in the current account. But external capital flows, more of which I will mention in a minute, mainly indicate that the economy is healthy. People are investing, they are bringing money into the country. However, it could also be a sign of some problems in the financial sector lying ahead.

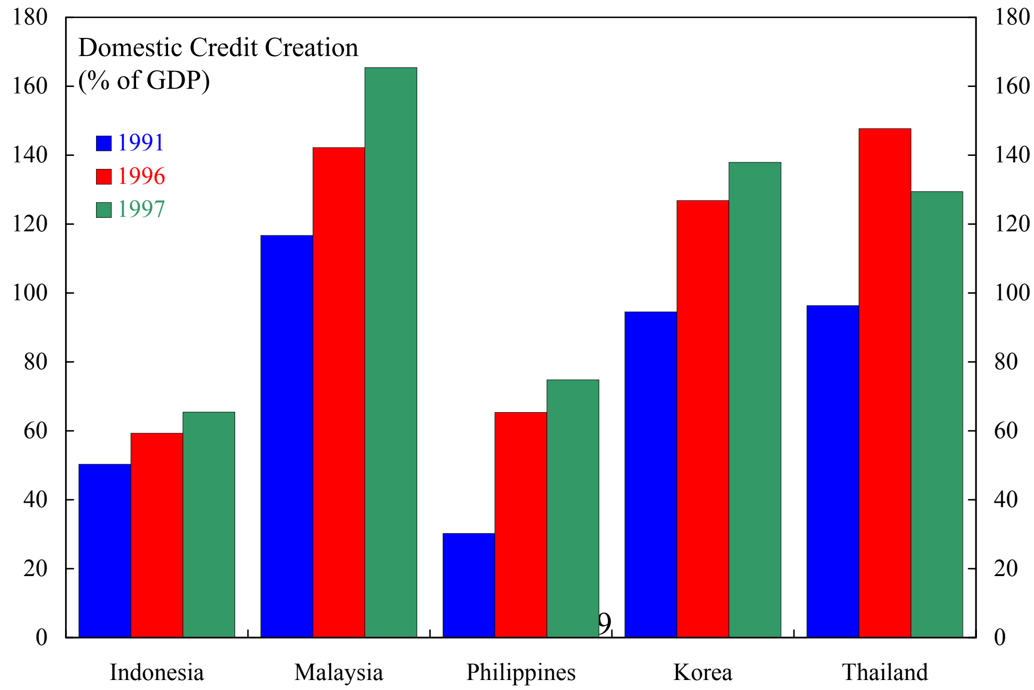
The third issue is the erosion of the quality of the bank portfolio. That is not unrelated to the rapid rate of capital growth. When you have rapid growth of the credit in the economy one of the characteristics you will observe is that the quality of the bank assets, and of the portfolio deteriorate. The number of impaired loans and non-performing loans increases. This is the third issue.

The fourth characteristic is that not only do we have a problem with financial institutions, the banks, the non-banks institutions, but we have a problem with the corporate sector, too. The corporate sector was extremely leveraged in Asia. If you can see that the debt to equity ratio of corporations in a given country is increasing rapidly, you will be able to predict that some financial troubles are coming.

So we have these four characteristics: strong growth of the size of the sector and a rapid expansion of domestic credit, the problem of external dependency on capital flows, the problem of the quality of the portfolio, and the issue of the imbalances in the corporations themselves. Let me just talk about the growth of the system. I said that the system grew very rapidly. Just to give one example, in Indonesia in 1988 there were 74 banks and in less than 10 years they had 240 banks. So there was more than three times increase in the number of institutions. That may not be extremely telling since I know that in transition countries and post-socialist countries, the number of financial institutions grew very rapidly, too. But that was because there was a large structural transformation, unlike in the countries of South-East Asia, where there was an immense expansion in the number of banks. That, *per se*, may not be a problem. The big problem is that this happened in a context in which prudential regulation was not growing at the same time. There was an inconsistency here between the prudential regulator and the growth of the number of institutions, and we know that the financial sector is one of the areas where we need regulation. It is one of the areas where we need prudential supervision. We can not allow the free market to expand without control. If we do, we would get ourselves into problems in the financial sector.

The rapid credit growth was another source of worry. The compounded rate of growth grows from 30% in the Philippines to around 19- 20% in Korea, and Thailand. This is a 20% a year rate of growth of credit. When the economies were growing let's say 7-8-9 %, and inflation was 1-2%, then you have a 10% real credit growth, in the economy over a long period of time. So this is what I mentioned about the working hypothesis, though now illustrated in a graphical way.

Figure 3: Domestic Credit Creation in Asian countries:



You can see that basically this is a very rapid rate of growth of credit in each of the five countries here, and we know that this particular rapid credit growth will create serious problems in the countries.

Now in terms of the dependence on external capital flows, we say in general this is a good idea, this is a good thing. But what is the problem with it? Why this type of over-extended growth in the external capital flows may be risky? Well, one of the things that we observe is that foreign direct investment (FDI) decreased substantially during the process as a percentage of the total flows. That means that a large amount of the flows that were coming into the country were debt-created. That is the main issue. The flows were creating debt. If you are creating debt then you are creating dependency. Basically, if you are financing a current account deficit with capital flows you can not necessarily depend on foreign direct investment but it will lead to debt creating. Consequently, that means that in the future you will have to find a way to reverse this situation. You will have to have a capital account surplus, in order to repay the debt you have created. That is exactly what did happen later. The second problem is that these flows came into the country based on what we usually call a moral hazard. That is basically because nobody did his homework well**.** Figure 2 shows large or increasing current account deficits (though the rest of the economy was in balance), rapid debt creation, and then we have a large amount of capital coming in. So why is this money coming in? Because there was some sort of certainty that if there was a problem in these countries, somebody would bail you out, someone would repay you. That is the moral hazard problem, where some sort of distorting incentives affect your behavior. The debtor would have the idea that there would be a bail out, or the idea that there would be no problem to have the loan repaid because the exchange rate has been more or less fixed and the government would not devalue, or would not let the exchange rate go. If the government devalued, it would bankrupt many firms. So there was this moral hazard problem based on the idea that nobody is going to lose money even though it is not quite clear how this current account deficit would be converted into current account surpluses to repay the debt. So that is the second issue that has to do with the financial imbalance.

The third issue is the erosion of the quality of the bank portfolio. This has to do with financial regulation in these countries. But the second interesting issue is the rapid growth in financial architecture or financial engineering. Basically it has been shown that if you take the total amount of the total of options that exist in the world (there are something like 300 different trade options) then it would turn out that two-thirds were invented in Asia (in Hong

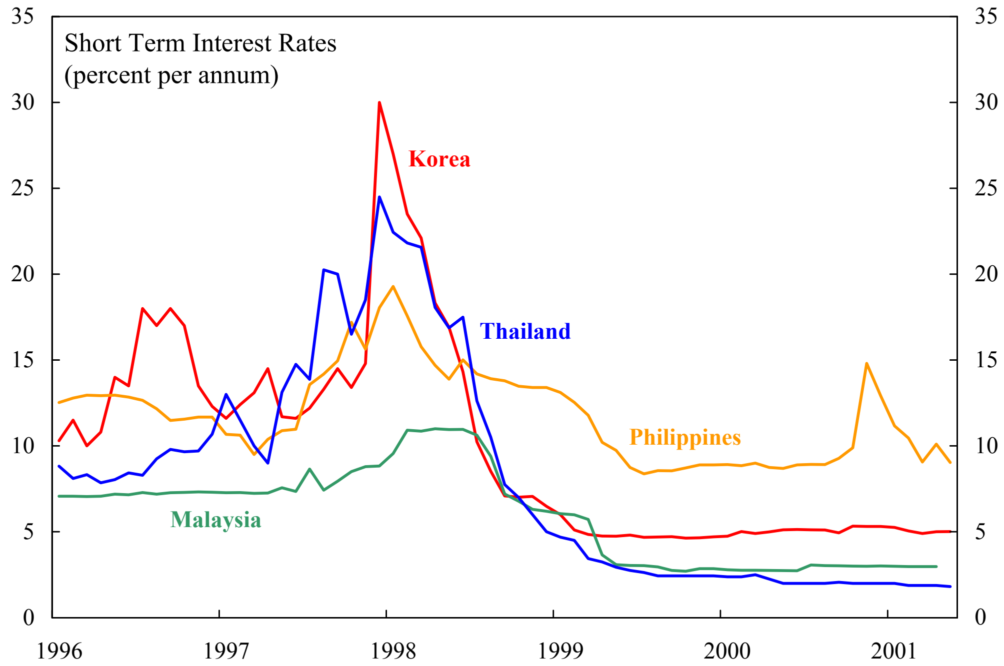
Kong, Singapore and other financial centers). All sorts of exotic and complicated option types were created. This is an example, but what I am saying is that financial engineering developed very rapidly in Asia. That made it very complicated to manage risk. For example, if a portfolio in a bank is composed of all types of different sorts of financial instruments, and you do not understand exactly how they work, certainly you would not understand exactly how to manage the risk that they bring. So you have credit growing very fast, capital flows coming in very fast, and very complicated instruments being developed. Obviously you will have problems with the ability to manage risk. Hence, the quality of the portfolio, the amount of debt that will be impaired increases. Because this happened, the managers were under some pressure to assure the shareholders that there would be some security. So they started to lend a lot against collateral without making prudential credit assessments. They were lending against collateral, against office buildings for instance, using the market value as credit. But as the market value of the collateral fell, the loan was basically insecure. So all these things really happened there. This had to deal with the banking sector.

The fourth characteristic is the issue of governance in the private corporations. The problem here is that it is not clear in Asia (it is not clear even today) who owns what. Does the bank own the firm or does the corporation own the bank? If the banks and the firms own each other, who owns everything? So it was not very clear. There were some family conglomerates. If you look at a picture of a conventional Korean conglomerate, the number of arrows going back and forth from one firm to another is amazing. It is basically impossible to understand, and in that particular situation it was very difficult to know what the balance sheet of one firm meant. So what you end up doing, is that banks lends to the firms which are owned by the banks, or the banks are owned by the firm, in a way that does not provide for prudential credit assessment. So connected credit was large, and there was also a lot of government intervention. You have to understand that in Asia there was a lot of government intervention in the assignment of credit. At the end of the day, the government would call a bank and say “we have these strategic producers of latex gloves (for instance), and you have to lend to this firm”. So at that point, the banks could not make any particular decision.

For that reason we have these four problems, as well as the corporate data that I mentioned. The firms were highly leveraged. The debt to equity ratio was extremely high. That was the situation that existed. Again I want to point out that even if the economies looked very balanced from the macroeconomic point of view, this situation was very prone to a crisis.

I do not want to go into the story of how the crisis started, but what happened was that the real estate market collapsed in Thailand. The loans of the banks had no collateral and then there was a lot of speculation against the currency. The government declared to the IMF that they had $30 billion in reserves. But the problem was that the government had more than $30 billion, but of what position in the market? They never declared that, they never showed that this was off-balanced. Obviously the central bank had no reserves, so the currency had to be devalued. There was capital flight, bankruptcies, and so on. Basically this issue detonated the crisis. But it spread throughout Asia very quickly with rapid contagion to all these countries. The countries with banking problems suffered the most. So again the hypothesis is that even though you may have macroeconomic balance, if you have problems in the banking sector then you may still end up in a severe crisis. What were the consequences here? The greatest consequences were that capital started to leave the countries, and the currency was devalued. Figure 4 illustrates how large increases in interest rates were - real interest rates went to levels of 30-40%.

Figure 4: Short Term Interest Rates in Asian countries:

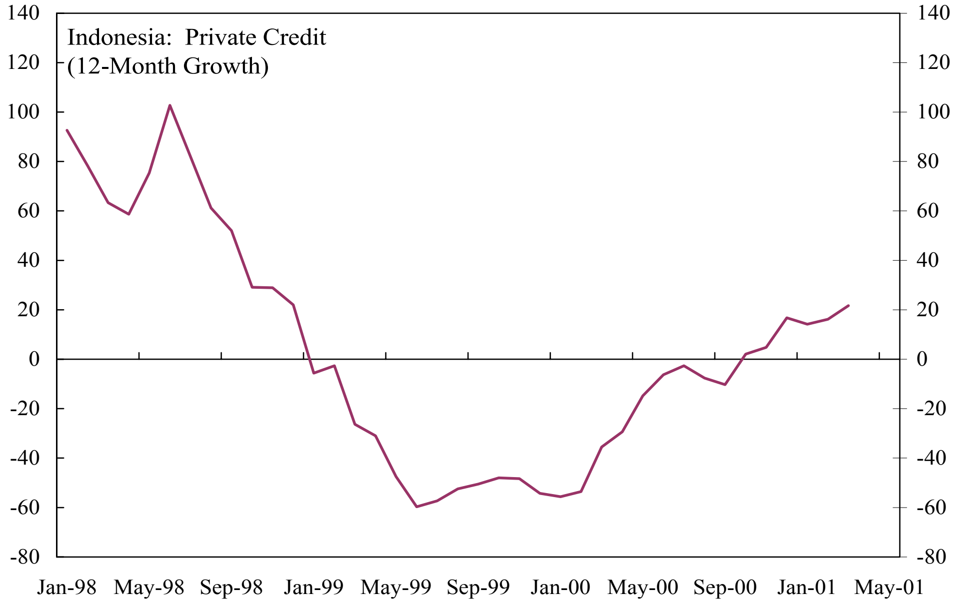


Along with substantial increase in interest rates, the aggregate demand failed, and recession affected all of the countries. In terms of falling income, it was not much different than the recessions that were observed here and in other countries in the region in the early 1990's. Those were the consequences.

Now let me go to the second point about the adjustments and the recovery. That is the reason for the crisis. If there was one message I want to leave here it would be that the crisis was not a pure contagion and it was certainly not a pure macroeconomic crisis. It was a financial crisis, a crisis that started from imbalances in the financial sector. That is why I think that modern macroeconomics today can not and should not ignore capital markets and financial markets. Because capital markets are at least as important as any one of the macroeconomic characteristics that we traditionally focus on, that is, fiscal and monetary policy and so on. Now what was the main issue of adjustment? Adjustment had three components and I will just discuss them quickly. The first was macroeconomic adjustment, the second was a structural adjustment and the third was a financial adjustment, a financial component, that is, financing from the international community.

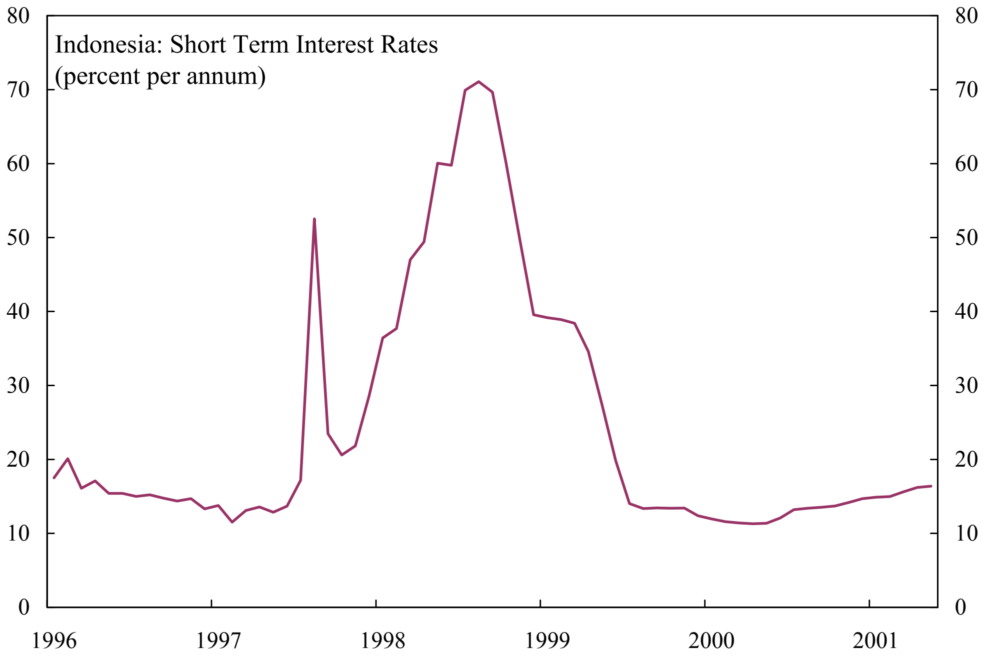
So the first element was macroeconomic adjustment. Basically what was done (and this is the point that Professor Kolodko mentioned) led to the criticism of the role of the IMF. You come to this economy and see that they are in crisis: capital is going out, income is falling, and interest rates are 40-50% in real terms. It is basically in disorder. You come to this economy in disorder, and what the IMF says you should do (and that is what happened) is to contract the macro. But as I said the macro was in order. So that was an element of contention. But that is what you have to do first, that was what was done first. There was a contraction in the monetary policy, contraction in the fiscal deficit (even though it was very low, almost non-existent) and the exchange rate was allowed to depreciate. Those are the three elements of macroeconomic adjustment that were used there. Basically you contract the money supply to create a stop to the capital outflow. You contract the fiscal accounts because you will need fiscal reserves to reconstruct and restructure the banks and the corporations; and you let the exchange rate go because you have to solve the external problem that the economy started with. We started from the point where we had an external current account imbalance. So this was what basically happened. If you remember the original figure, the rate of domestic credit creation was very rapid. From 1991-97 the rate of credit growth was more than 20% in real terms. Now what happened immediately after the crisis is that there was a very large contraction in credit growth. The problem of credit expansion was completely reversed in all the countries. As you can see in Figure 5, this was especially the case of Indonesia. This country is a special case as everything that happened in Asia, happened in Indonesia multiplied by a factor of 3 or 4. So I needed to present a different chart, because otherwise it would be distorted completely. Fist of all, what we see is a large contraction in credit.

Figure 5: Indonesia: Private Credit Growth:



In terms of interest rates, we can see a large spike in interest rates.

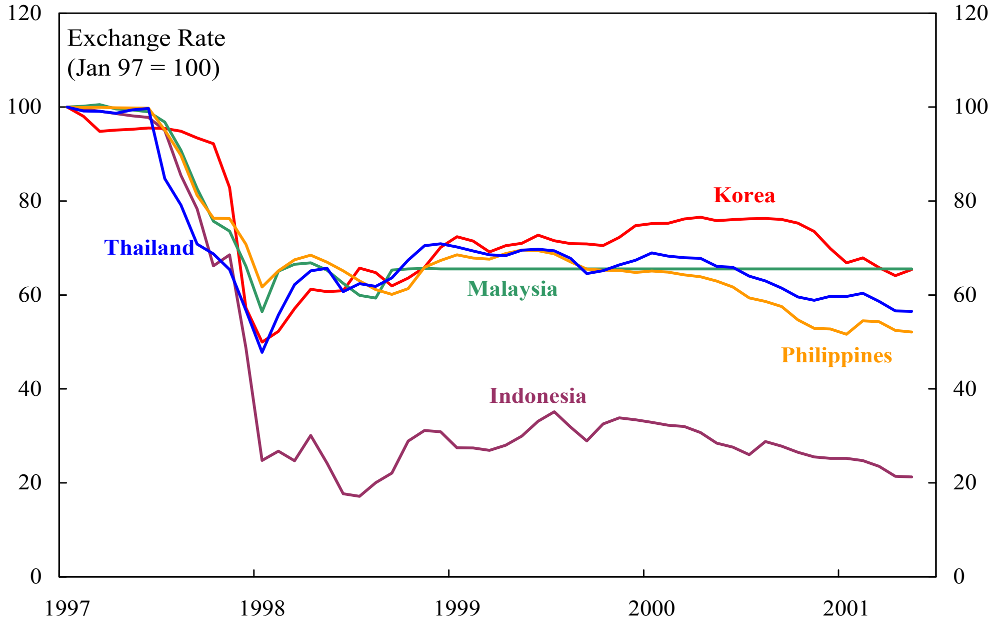
Figure 6: Indonesia: Short Term Interest Rates:



We need interest rates to be high in order to stop the large capital outflow. Again you see in Indonesia, large increases in interest rates.

The exchange rate, I think is also an important illustration. All of the exchange rates were devalued. In Indonesia much more, but all the exchange rates were devalued. We also see that one of the countries, Malaysia, fixed their exchange rate all together. The other countries did not fix their exchange rates, but basically let the exchange rate fall and then they recuperated to a given level.

Figure 7: Exchange Rates after the Crisis:



So we have these three elements: fiscal contraction, monetary contraction, and exchange rate adjustment. This is the macro side. On the structural side: banks were recapitalized (as was said earlier, the banks were having problematic portfolios), insolvent institutions were closed. Because there was such rapid growth in the amount of institutions, we needed to make adjustments by closing insolvent institutions, and restructuring corporations.

There is the third component: the external financing. This is the packages that were put together by the international community to finance the crisis. As you see in Table 1 billions of dollars were transferred or lent to these economies.

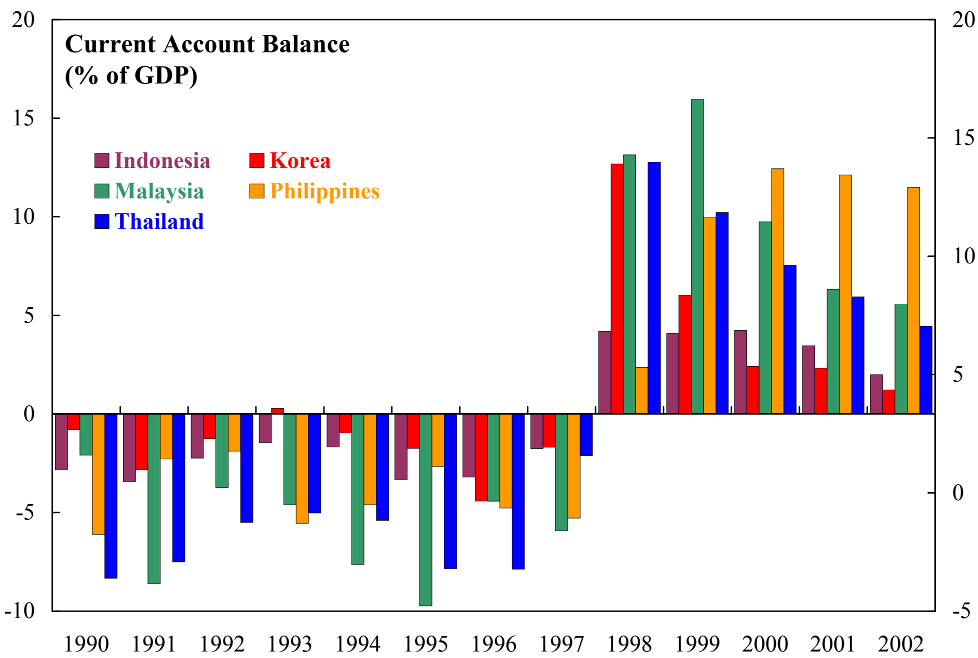
Table 1: External Financial Packages in USD billion:

	Indonesia	**Korea**	**Thailand**
Total	**35.0**	**58.5**	**17.2**
IMF	10.0	21.0	4.0
World Bank	4.5	10.0	1.5
ADB	3.5	4.0	1.2
US	3.0	5.0	n/a
Japan	5.0	10.0	4.0
EU	0.0	5.0	0.0
Others	10.0	3.5	6.5

This was the financial cost, not the economic cost of the crisis for the international community. We see that Korea, for example, received a package of $58 billion made of up $21 billion from the Fund, $10 billion from the World Bank and the rest from bi-lateral sources. This is the size of the adjustment. So the three things were working together. This money was not given as a grant; this money was given conditionally in order to spur reforms and adjustments that took place in the country. What happened once these adjustments had been made? What were the results? What is the current situation that we might observe now, four years later? What is the current scenario?

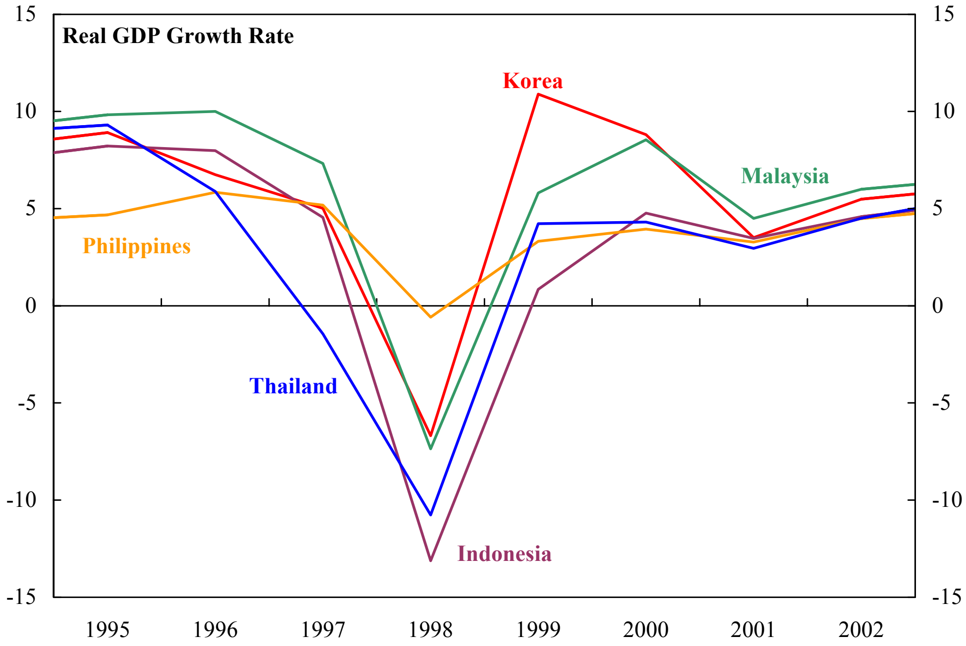
First of all, there is the macroeconomic outcome. We said that the adjustment developed in three phases: macroeconomic, structural, and financial. What was the macroeconomic outcome? We see that there is a sharp correction in the current accounts. As a consequence of the measures taken, we have an adjustment. The rate of growth recuperated, and the inflation pressures were relatively low. Now let us look at this issue. Figure 8 is, I think, a very telling picture.

Figure 8: Current Account Balances Before and After the Crisis:



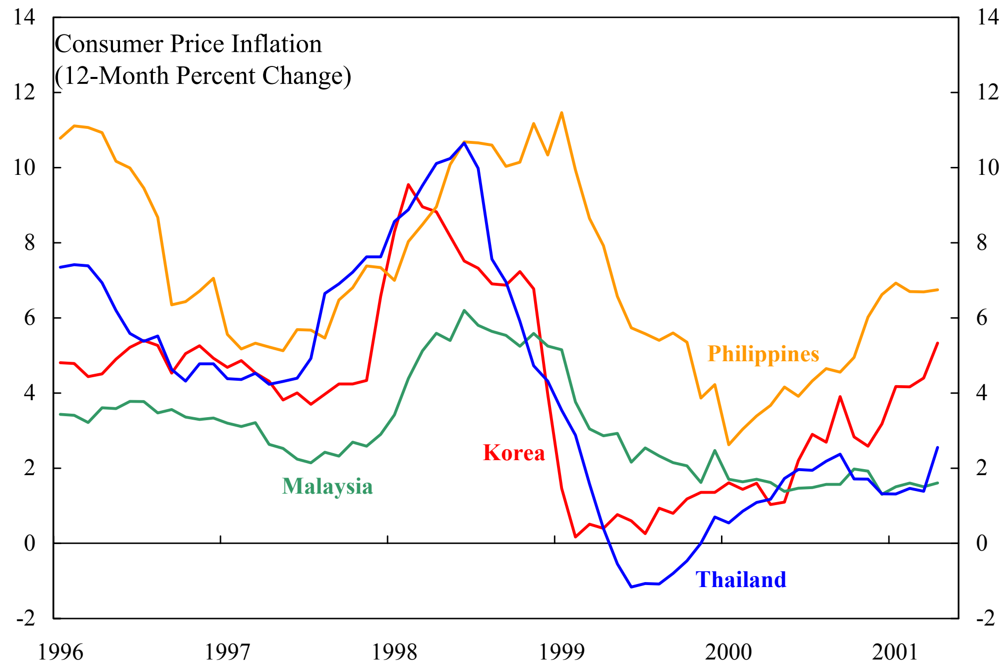
You see that the current account well illustrated the external imbalance. Until the crisis broke out, all the economies basically had deficits. They were importing savings one way or another. Obviously at one point this was debt creating. It would have to be reversed. Well, that is exactly what happened. I think that the Figure 8 aptly confirms this point. It illustrates that the adjustment may have been painful but that is what happens when you spend more than what you have at a given point. You will have to spend less than what you have. There is no way around it. You can tell the story in different ways. But that is what happened in Asia. In order to correct the financial imbalance, to finance the external current account deficit, they had to turn it around. Now what happened to growth? Let us then look at Figure 9.

Figure 9: Real GDP Growth Rates Before and After the Crisis:



It is a very large V shape and it is very short. In 1997 there was a tremendous collapse in all of these economies (probably the Philippines were least affected), but all these economies collapsed at least 15% of GDP, not unlike the collapses of the post-socialist economies. But we see a very quick recovery. One year later, economies are already growing in positive terms. In 1999, all the economies are growing. Now, in the year 2001, we see that growth is a little lower because of the international situation but they are approaching growth of more than 5% for next year. So we have a perfect V-shape here. In terms of inflation we see that it has risen, but then there is stabilization (Figure 10).

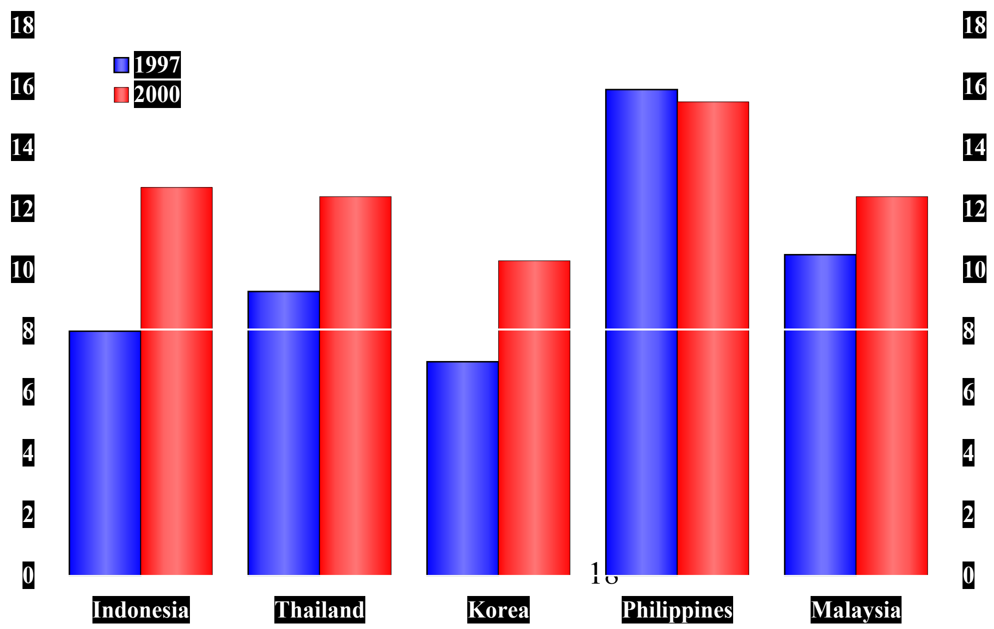
Figure 10: Consumer Price Inflation Before and After the Crisis:



From the macro side, we could say that this has been a success. The external imbalance was adjusted, there is low inflation and growth went back to where it was. But we still have problems in the banking sector. We see that we have to re-build the banks completely. Let me just list what happened. There was a large consolidation in the number of banks, the capital requirements were tightened. Foreign banks were allowed to come in and there was a restructuring of the way banks were started. Figure 11, 12 and 13 will give you some idea of what happened.

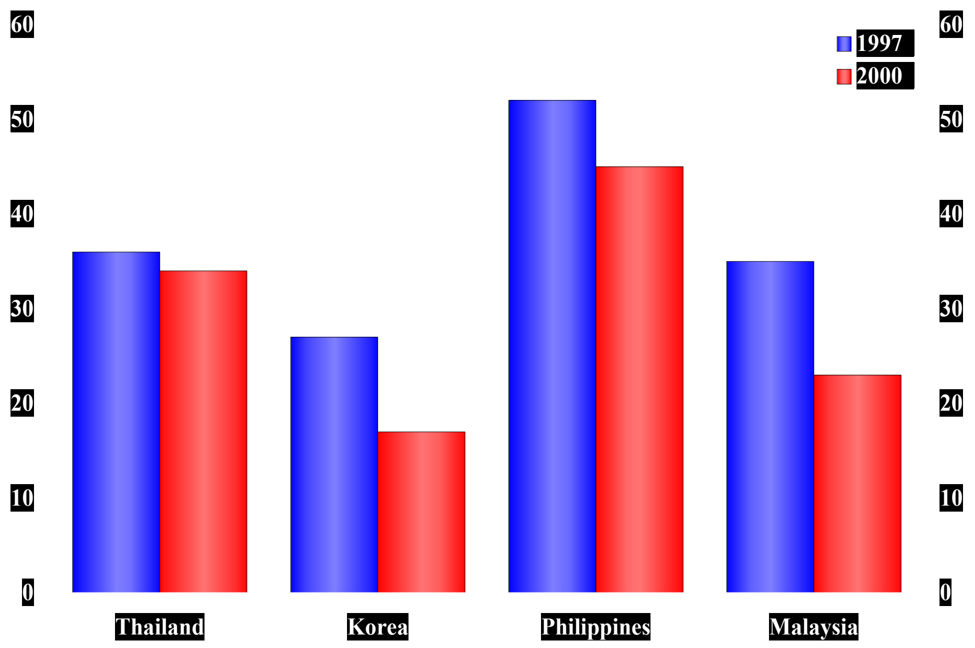
First of all, there is the capital to equity ratio.

Figure 11: Capital Adequacy Ratios 1997-2000



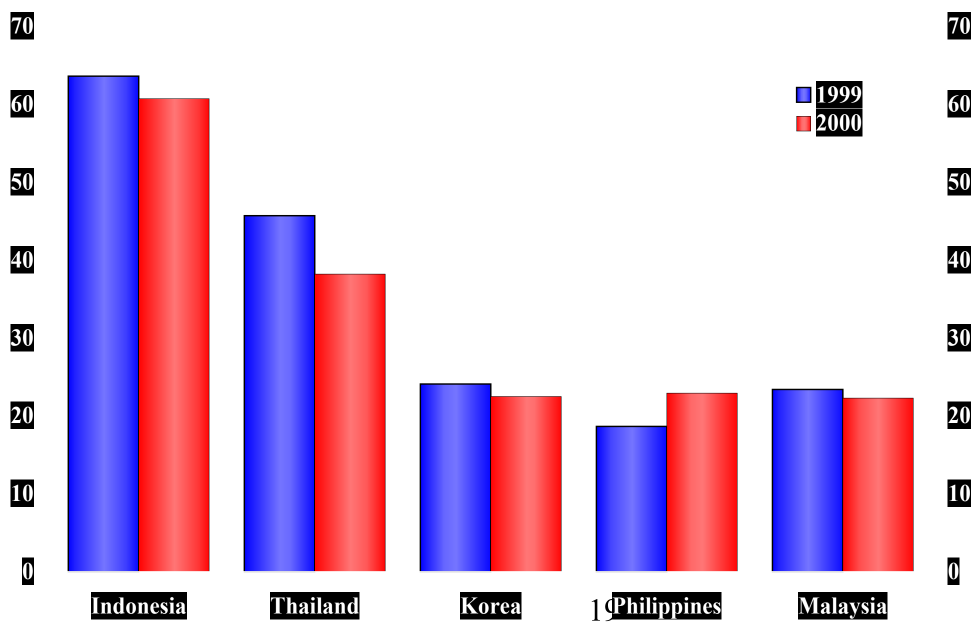
Most all of the countries saw a large decrease in the number of banks from 1997 to 2000.

Figure 12: Number of Banks 1997-2000



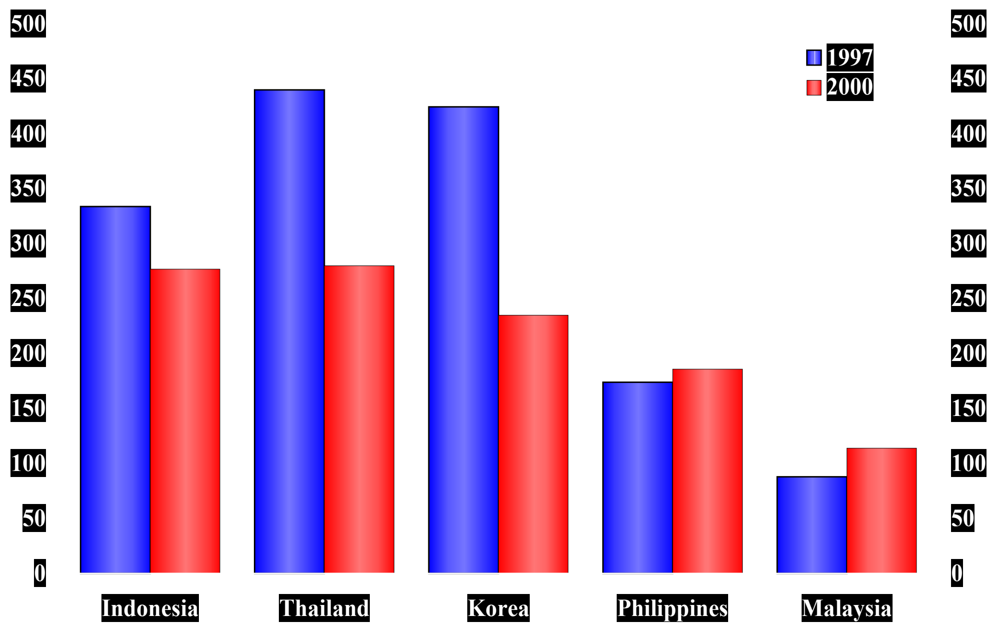
The growth of the number of banks has been contained. But we still have serious problems in the banking sector. For example, the issue of non-performing loans. In Figure 13 you can see that the number of non-performing loans has not been reduced (the black columns are not different from the grey ones.)

Figure 13: Impaired assets (non-performing loans) in 1999 and 2000:



So you have fewer banks. You have capitalized banks but you still have seriously impaired assets. I would like to say that the banking sector still needs restructuring. So four yeas later we see that the macroeconomic situation has recuperated, but the financial sector still needs serious continuos reforms. So if you ask what is the outcome of the crisis I would say there was a large loss of income. During this period there was an uncovering of all the financial imbalances that were in the system. Where do we stand now? Now we see that the macroeconomic system suffered but recuperated quickly. We still have problems in the banking sector, which have not been completely addressed. The corporate sector continues to have problems with the debt-equity ratio. In Figure 14 for example we see that the amount of debt to capital in Asia was extremely high in the beginning. In some countries such as Thailand, the debt-equity ratio was over 450%. So this has been adjusted, but not completely. So there are still problems there.

Figure 14: Debt to Equity Ratios, 1997 and 2000

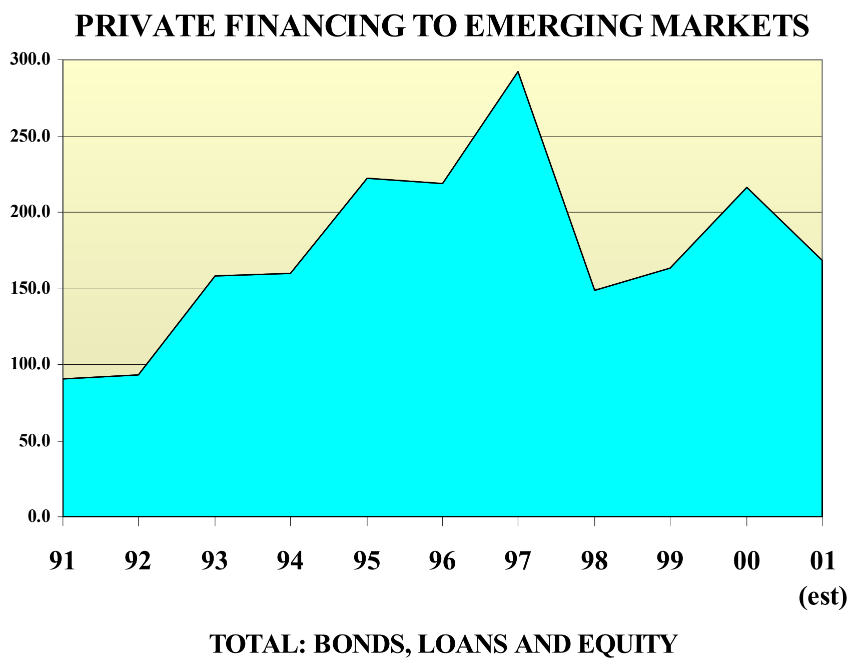


Now let me turn to the implications for the rest of the international system. The implications for the emerging markets in Central and Eastern Europe, Poland among them. What are the implications of this Asian crisis? I think that in the beginning Professor Koźmiński said that it was very far away. This is true, yet nonetheless even in this far away place, the crisis affected the inter-connection between countries. It is quite clear, that the lesson to be learned is that you can not disregard financial imbalances. Countries in this region started from a very low base of banking, a very low base in financial institutions, but then grew very fast. It is clear that this is a recipe for problems, if it is not addressed properly at the prudential level and the supervisory level, at the risk assessment level, at the risk management level. That is a lesson that has been learned.

What happened in the market itself, and in emerging markets? I will concentrate on three pressures on emerging economies. What happened following the Asian crisis and after the Russian crisis? The Russian crisis came one year later in August 1998, but it was a sort of continuation of the Asian crisis in terms of its character. So what happened? There were three consequences: an effect on the volume of capital flowing into emerging countries, an effect on the price on the capital flowing into emerging markets, and the composition of the capital flows, and finally there was an effect on the overall attitude of the investors towards emerging markets.

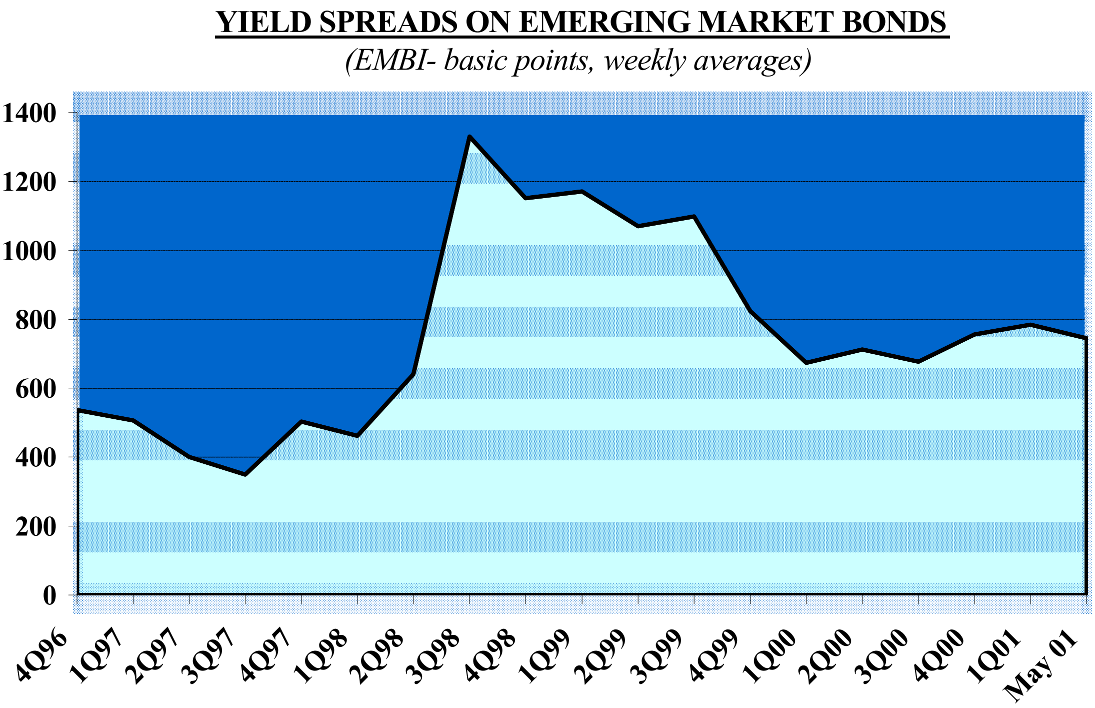
So first of all we see a reduction in the volume of capital flows after the crisis in 1997 and particularly after the crisis in Russia in 1998.

Figure 15:



There was a reduction in the amount of capital trading in the rest of the world and flowing to emerging markets. Secondly, there was an increase in cost of financing. That is the price you have to pay for borrowing or for getting resources from abroad, as measured in the country risk, which is measured in the spread among the difference interest rates that each country has to pay. Compared with the U.S. interest rates, for example.

Figure 16:



The third issue is that we see a different attitude toward capital flows. There is much more volatility, and there is more differentiation between countries. But the problem is much more volatility. So the Asian crisis has a very clear impact on Emerging Markets meaning that less savings are being transferred. These savings cost more, and they are more volatile, less dependent. You can depend less on foreign capital. So the first thing is the quantity, you can see in Figure 15 that after 1997 there is some fluctuation. Still, there was almost $300 billion transferred after 1997. There is a large decrease and then you have some fluctuation in the year 2000. There was recuperation to $200 billion but we expect no more than no more than $158 billion for this year. We can also see a reduction in the cost of funding after 1998 (Figure 16). The composition, however, also changed, dramatically. The only thing that was more or less maintained at the same level was the level of direct investment. FDI has not been dramatically affected by the crisis. This is because that was not a real sector crisis, but rather, it was a financial sector crisis.

In Table 2 we can see that the loans and bonds are basically negative. There is repayment of loans and bonds. So the flows to the emerging markets are largely composed of direct investment and some portfolio equity. These are repayments of loans and bonds. Basically, in Asia, with some exceptions of FDI, which was not directly affected, just the financial components of the capital flows were affected.

Table 2: Total Net Capital Flows in USD billion:

	1993	1995	1997	1998	1999	2000
PRIVATE	**124**	**189**	**126**	**45**	**72**	**32**
Loans and bonds	**-14**	**50**	**-62**	**-127**	**-136**	**-172**
Direct investment	**57**	**97**	**145**	**149**	**153**	**146**
Portfolio equity	**82**	**43**	**43**	**24**	**54**	**58**

That was about the volume of the capital flows. Now what happens to the cost? The cost I think is very important, this is the spread, called country risk. On average the country risk represents the additional cost of borrowing that is being paid above the American threshold benchmark. In Figure 16 we can discern a large increase in spreads in 1997 and in 1998 as a result of the Russian crisis followed by some decrease now.

But we are at a higher level. The average as of June 2001 is about 750 – 800 points. I will just show the difference between countries. On average, emerging markets are paying 800 points, that is 8% above the threshold in the U.S, this is the cost of borrowing. Before the crisis it was about 450 points on average. For Asia this is not a uniform picture. This is an average. The third point I mentioned, that is the difference between two countries can be seen very clearly as you go from country to country. You see in Table 3 that one country may pay 150 points (or 1.5%) over the benchmark, whereas some other countries may have to pay that close to 15% above the benchmark. This situation is due to different country risks.

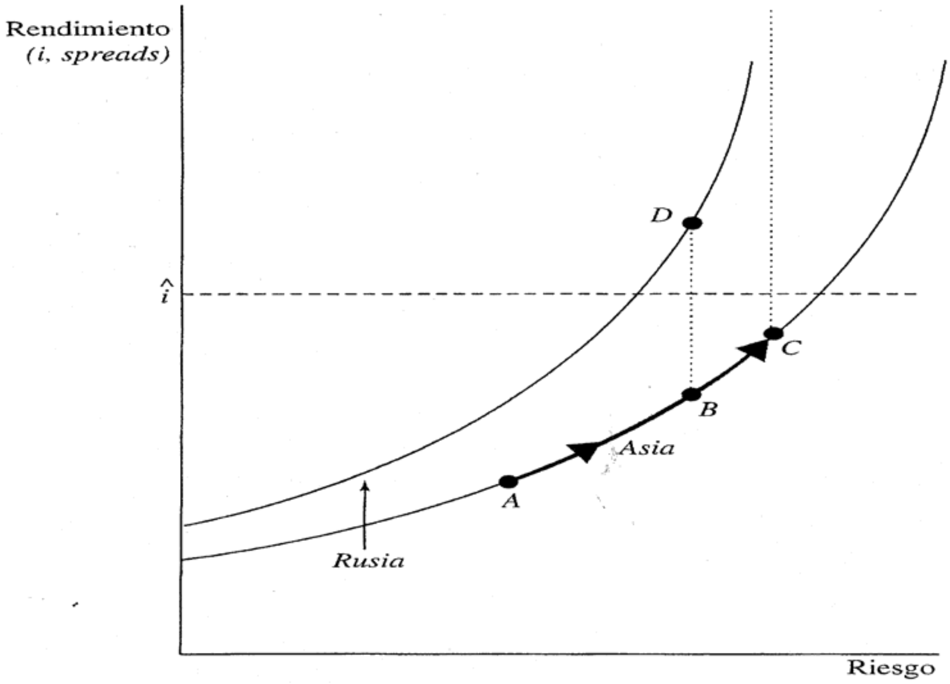
Table 3:

Sovereign Bond Yield Spreads to US Treasuries
(as of June 6, 2001)

Korea	**149**
Poland	**179**
Qatar	**266**
Mexico	**323**
Panama	**397**
Morocco	**403**
Philippines	**545**
Colombia	**603**
Bulgaria	**662**
Peru	**691**
EMBI +	**730**
Brazil	**823**
Turkey	**828**
Venezuela	**829**
Russia	**869**
Argentina	**910**
Ecuador	**1351**
Nigeria	**1540**

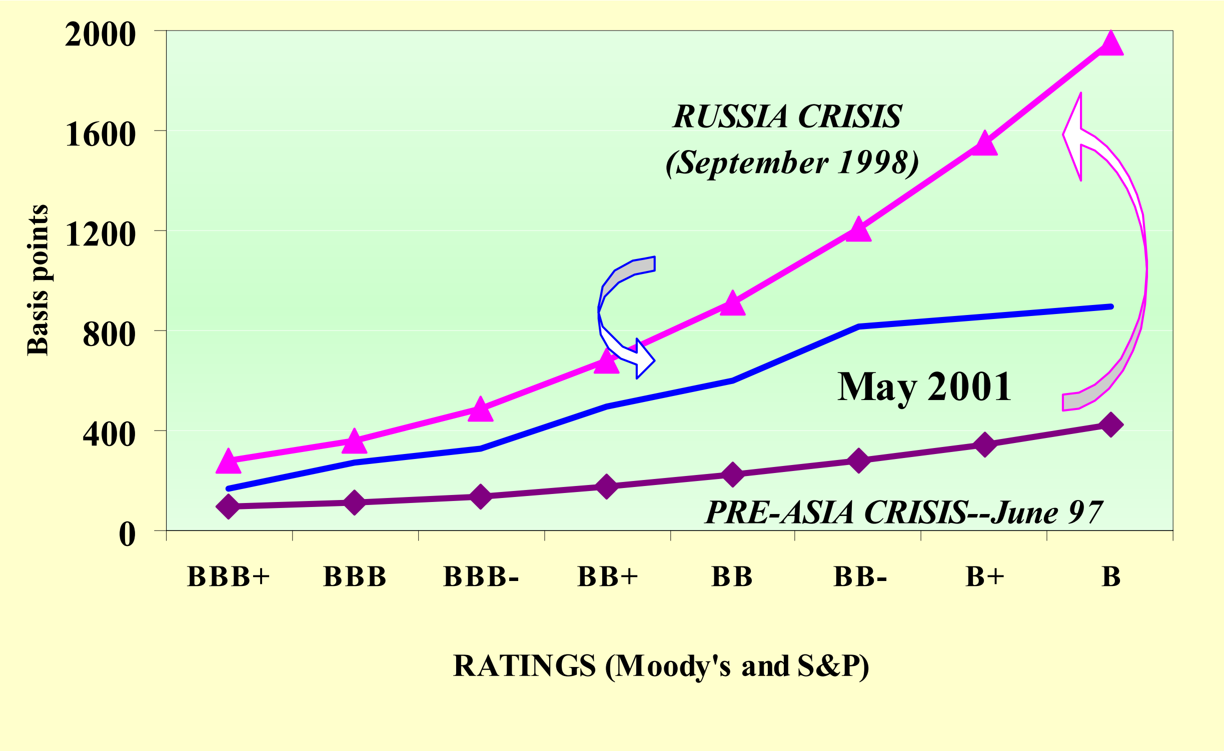
There is more differentiation. In the table above you can see that Poland appears pretty well off. This is the spread as of the beginning of June. We see that the average for Emerging Markets (EMBI+) stands at 730 points. But the average is composed of countries that have very little country risk, and so have a very high contribution. We see that Poland is one of the best performers, actually the second best performer in this group. Which means that basically for an average loan, you pay less than 2% above the American threshold. This is the country risk for Poland at this particular point. Now of course not all loans pay that specific interest rate but these numbers are very telling and you can see the rank of the different countries. Why does this happen? This is the last point that I want to make. Why do we observe these lower volume, higher prices, and more differential? The hypothesis is that there has been a change in attitude. There has been a change in attitude in the direction of increasing the risk aversion of the investor. It is not that people want to price risk higher because there is more risk. Even for the same risk, people want to price it higher. In order to invest in a country, investors want to be compensated more for the same risk. And in addition to that maybe there is more risk, but there ***is*** more risk aversion. It is not only that the level of risk is higher but also there is more risk aversion. This main point I will now illustrate in Figure 17.

Figure 17:



Let us say that we were at point A. We say that there is a trade-off between risk and return. The Asian crisis increased the risk from A to B. For all countries that were at point A the risk went to point B. So there is more debt interests to be paid. With the Russian crisis the whole curve moved to the left. The whole risk aversion moved to the left. So if a country was at A and moved to B, after the Russian crisis, the country moved to point D, which is a very high level. But for some countries, let us say the country that was already at point B, it moves to point C. There is a shifting of the curve that excludes the country from the market altogether. So for some countries the Asian crisis combined with the Russian crisis expelled them from the market altogether. For other countries, it only increased the risk. This is a theoretical presentation. We might say that we move along the curve, and the curve moves, however, it is very interesting that this is exactly what happened in reality! That was a theory, now this is a reality.

Figure 18: Average Yield Spread by Credit Rating:



In Figure 18 you can see the countries at point B before the crisis. This is the credit rating from Standard & Poors and Moody's. So we see the lower number of B's that you have, the higher risk you have. Before the Asian crisis countries with ratings between B+ and single B (B stands for junk bonds, basically close to default bonds) were to pay between 300 and 400 (it was close to 100 for Poland and Korea with a BBB rating). After the Russian crisis the whole curve moved substantially to the left. That was the increase in the risk aversion. By now we have a descent and we are now in the middle between the two curves. Before the Asian crisis, it was about 100 basis points spread for a country like Poland. But after the Russian crisis it went up to 270 basis points. By now its 170 more or less. But for other countries, the spread increases with the risk. So this is the reality, the other picture is the theory.

So what we can say is that the Asian crisis has changed the attitude of investors from valuing risk at a given level. Today, they price risk much higher. What that means, is that today to behave badly in the financial or the macroeconomic area costs much more than before. You can see that before the crisis, if you were like Poland (rating of BBB) and if you were like Algeria with a single B rating almost close to default, the difference in spreads was close to 3%. Today the difference is much higher – the current spread between BBB and B is close to 6%. So today to behave badly in the financial sector costs much more. I think that I will stop here. If there are any questions I would be pleased to answer them.

Grzegorz W. Kolodko: Thank you Mario, indeed. That was a very interesting lecture. I think that all of us have learned a lot, including the IMF in recent years. But the general conclusion is as always that each cloud has a silver lining. Especially, because of what we have seen in this crisis in the real sphere of economy. The contraction has lasted for quite a short period of time. I think much shorter than what was envisaged when it started a few years ago. That is the good news presuming that the countries of South East Asia are back on the path of sustainable or sustained growth. So this is still the open question. I think that we also have learned a lot in the other part of the emerging markets, that is, including Eastern European countries. We have learned what to do and what not to do to avoid a crisis. We have learned how not to build the causes of a crisis as happened in countries far away. But in the global economy nothing is far way, particularly as far as the flow of capital is concerned. I do not think it makes any difference if it is Indonesia and Poland, or Poland and the Czech Republic, because from this perspective the difference is precisely the same due to convertibility, due to exchange rate liberalization and the free flow of capital. But now the floor is yours. I would especially encourage our students to raise these issues to challenge the thesis of Professor Blejer and ask him questions.

Arnaud Fouillet, France: Although I am from France, my question is, however, not a French one. I would like to know the role of the exchange rate management in the Asian Crisis.

Mario I. Blejer: As a matter of fact, I had a transparency about the role of the exchange rate management, but just for the sake of brevity I skipped it. Yet, that is one of the issues that are very contentious in our discussion today. What was the pattern? The pattern was that one country after another let their exchange rate go. As soon as Thailand had a problem, they had to let their exchange rate go. Then came Indonesia Korea, Malaysia, and the Philippines. All of these countries let their exchange rate go. Hong Kong did not and after about eight months or one year, Malaysia fixed their exchange rate after first a steep devaluation. Malaysia fixed the exchange rate and imposed some exchange controls. So there was a big discussion what was the role of the exchange rate. What happened with the exchange rate was that there was an immense devaluation and then there was some revaluation. There was some over-shooting. This over-shooting was caused an immense amount of uncertainty in the system. So the debate is if it was correct to let the exchange rate flow or should it have been once and for all devalued (like Malaysia did) and kept at that level? If you look at what actually happened.

The point is that except for Indonesia there was a great overshooting and then the exchange rate went back to the original level, or more or less to a fixed level at a lower rate. The role of the exchange rate was clear. You needed to convert a current account deficit into a current account surplus. To do that you have to become more competitive. And one way to do that is to have a more competitive exchange rate. There was no doubt that an adjustment was needed. The question was if the overshooting was needed. The devaluation was not in question, I do not think it was questioned by anybody. What was questioned was if it was the right thing to do to let the exchange rate sink, and then come back to the right level and keep it there, or would it be better to make a once and for all devaluation and hold it at that point. Now we can not make an experiment, that is the problem. You ca not make an experiment to see what may have been best. It is with the benefit of hindsight that now we see quite clearly that there was a real cost to the overshooting. In Indonesia, the exchange rate was about 1000 and went to 18.000 and then went back to 11,000. The question then is if devaluation from 1000 to 11,000 would have been enough. Did you have to go to 18,000 and create a tremendous disruption in the economy and partly create this big collapse? There were bankruptcies; firms stopped working and so on. So it is pretty difficult to give a firm answer. But it seems probable that it would have been wiser to defend a certain floor of the exchange rate and not let the exchange rate sink to levels that really were overshooting, which was partly responsible for the crisis. However, the devaluation was absolutely necessary. It is easy to say this now, though at that time there was a big debate. What we know for sure is that exchange controls that were used in Malaysia to keep the exchange rate fixed were not very effective. They were completely eliminated two weeks ago. They were not very effective because they were avoided in many ways. They brought a lot of damage to the country. For example in Table 3, where Poland was ranked #2, Malaysia was not listed. Why? It is because the investment banks that were in this country had to deal with exchange controls and said they could not do business at all. So they took the country out of the index altogether. So basically, the country was taken away from the emerging market group, because of the fact that they had exchange controls. So it think it is quite clear that the exchange controls were not effective and they had to be eliminated and cost a lot of trouble. Probably it would have been wiser to use part of the large financial packages from external sources to defend a certain floor of the exchange rate. So that is the answer. I thought the devaluation was useful but floating the exchange rate may have done some damage.

Marcin Piątkowski, TIGER: Dear Professor, my question will be more future oriented. I was wondering if you see any big risk for another currency crisis in some of the other emerging markets. Especially given the apparent slowdown in the American and European economy and the ongoing recession in Japan. The scenario that I am thinking about is that this worldwide recession may prompt a deep bear market in the global stockmarkets. The bear market may at some point detonate into worldwide panic among investors, which would most likely be leading to a significant capital flight from emerging markets (the so-called "flight to quality" syndrome). Do you see any emerging countries particularly vulnerable to this capital flight? Argentina and Turkey especially come to my mind. Argentina brings me to my second question about the famous Argentinean currency board. Do you think it will ever be lifted or changed in some shape or another?

Mario I. Blejer: In terms of if there is going to be another crisis or not, obviously crises by definition can not be predicted. This is because if you can perfectly predict crises then you can avoid them. But I will tell you that if you go to any discussion by policy-makers in an international forum they will always start by saying there will be a next crisis somewhere, sometime. So we should know how to manage the crisis, as preventing it would be entirely impossible. We have to know how to manage it. That is the real view, depending on how you define a crisis. At a given point, the exchange rate regime, the inflation target regime, the monetary regime that you want to have may have to be abandoned for another regime. That would be a definition of a crisis. I would believe that given the deceleration of the American economy and given the fact that certain economies are very dependent on their exports (for example, Asia is very dependent are their exports to the U.S.; some countries like Malaysia are not only dependent on exports to the US, but they are dependent on exports from a specific sector: electronics, for example), there is a potential deceleration in the global economy. The question is how is this managed. We believe that (although this is the subject for a completely different lecture) the international community, international institutions, developing and emerging markets, have learned from these recent crises. I have learned from these factors that I have mentioned like risk aversion etc. A lot of things have been put in place to help us to be able to manage the next crisis. For example, there are issues of increased reliance on early warning indicators. Sort of like risk management at the macro level, when you try to analyze, in a period of about six months, what are the chances of you not having enough reserves to pay your debt. Or if you will not be able to have enough currency reserves to keep your exchange rate peg or to maintain your inflation targeting and so on. So there are improvements in that direction that would minimize the impact of a next crisis. There would be some warning signs that a crisis is approaching. However, you can not say where it will occur. It is like trying to determine where you think there will be a traffic accident, if it would be this particular corner. Well, yes it is possible, but you do not know who is going to crash there. So it is difficult to predict specific things. Now I think there are two areas that are important to keep in mind. One is the point I have been making from the beginning: you have to pay a lot of attention to financial balance, to the financial sector balance, to credit and risk management in the financial sector. In the past it was believed that if you have a good central bank and you have a lender of last resort with some sort of positive insurance, it would not matter even of banks collapsed. But now we know that we have to look at the macroeconomic situation as a whole. So that is extremely important. For example you mentioned Argentina compared with the case of Turkey. It is quite clear if you look at both countries that they both have external debt problems. And if there were a crisis it would be a crisis of not being able to service the external debt. But there is a very different situation in the financial sector. In Turkey, quality of banks is very low: recently there were thirty-odd banks, which were very shaky, and many of these banks are going bankrupt. While in Argentina the banks are very healthy because the crisis already took place a few years ago, and there has been thorough restructuring since then, new foreign banks and so on. So I see a big difference. On the other hand, the structure of the debt is very important. It is not the total amount of debt that you have to look at but the structure of the debt. People often confuse these two things. I think even the EU has also confused this when they stated in their convergence criteria that debt, as a percentage of GDP, was an important criteria. 60% ratio of debt to GDP was the criteria for EMU, but this is not a relevant criterion. In Argentina, debt is 70% of GDP; Italian debt is probably 80%. The appropriate question is the structure of the debt, the short-term versus long-term debt, the structure of the maturity, etc. For example, if someone has a mortgage of $500,000 and somebody else has a credit card loan of $60,000, the one with the credit card loan is much worse off because the mortgage structure of payments is much different. This is the area where you have to look at. You have to look at the short-term debt compared with the resources that can be mobilized in terms of fixed exchange rates.

About the currency board story, I think that it is quite clear that the profession is not clear on these issues. The view is that only two polar regimes can be maintained either a pure floating or a pure fixed regime like a currency board or a currency union. I do not think this has been proved, but clearly a regime in the middle can be sustained. It is clear that the currency board and a very rigid exchange rate can be maintained if you are willing to play by the rules. I think that there are a number of currency boards in the Baltics, in Bulgaria, in Hong Kong and in Argentina, which still work even though everyone has been saying that could not be sustained. Of course, there will be some problems. But the currency boards have been sustained so far. Is it a model that can be copied in other places? I do not know. But what is important is the discipline. As long as this discipline is kept I think that it may be fine. It is not important what the regime is itself, it is important what the accompanying policies are.

Justyna Pawlak, Reuters Poland: Do you see any warning signs for the Polish economy? Interest rates are very high, the currency is very strong, and there is a risk that exports could deteriorate and that could lead to a growing current account deficit. Would you say that there are risks coming on the horizon that Poland will fall into a crisis? Or do you think that with current problems of persistently high fiscal deficits the risk is higher now compared to, for example, half a year ago?

Mario I. Blejer: It is very difficult to give you an answer about the Polish economy because every single person in this room knows more about it than me. For me to say something about it would not be a very wise thing to do. I will tell you two things, though. First, you have to distinguish short-term from long term. The interesting thing is that the credit rating of Poland has not changed. It has been re-affirmed. As a matter of fact Standards & Poors and Moody's have reaffirmed the credit rating and the positive outlook for Poland. These rating agencies do not change the country rankings very often, but they change their outlook or they put it under a credit watch. This is easier to do, because you do not have to change anything immediately, it is the decision of a committee. They have re-affirmed the positive outlook and the credit rating of the economy. Why? Because the structure, and the probability of a problem, or a sort of default is very low. And it continues to be low. The prospects in the medium and long run is very good because of the incoming accession into the E.U., the potential of the economy, the structure of the reforms that are taking place, and the strengthening of the financial sector. So the long-run outlook is good. I hope that will answer your question. Those that are putting their money in or those that advise investors to put their money in have not changed in the last six months. Obviously that is because there have not been warning signs to investors. That was the long run perspective. In the shorter run, however, I see a different problem. Obviously the economy is in a slowdown at this particular time, because unemployment is very high, and interest rates are very high. I do not think this is something that you can do too much about.

The economy is pricing credit that way at the moment. Maybe if you forcefully reduce interest rates in some way, the subsequent increase in credit may get you into some real trouble. Ricardo Hausman has a good paper on that, as well as a few other scholars. Very good evidence shows that when credit accelerates in order to get an economy out of a recession, or to finance some sort of boom, you always get into financial trouble. That is because of the inability of banks to handle rapid increase in credit. So I would not look to the interest rate. There is a problem with the strength of the currency, which is related to the interest rate, the capital interest rate, etc. I understand that in the short term there are also political uncertainties, elections that are coming up. So the shorter term is more problematic but I do not really have a recipe for the shorter term. What I do know is that are many economies that have been able to maintain their course over their short-term problem and still head for a more successful long-term. The economy in Poland is growing between 3 and 4 per cent. Projections of 4 per cent for next year are pretty good. That is not a very low rate of growth. I would think that the unemployment is high, but it is important to remain on course. Fiscal and monetary expansion, in these circumstances, is only going to create more risk and probably deterioration of the financial outlook. In the long run, I would say that generally things look good in Poland. There are very short-term capital inflows coming, attracted by high interest rates, and they are appreciating the exchange rate. I would say that one needs to know where this money goes. If it goes to the banking sector, what is their prudential situation? The Central Bank of Poland should be making sure that the banks do not lend this money long-term, creating maturity mismatches, or lending this money in different currencies creating currency mis-matching. So the money is coming in, and if it is put in some way that matches the need, than it is fine.

There is a famous statement by Jacob Frenkel when he was the Governor of the Bank of Israel. He was experiencing an episode very similar to the one you are describing. There was a lot of capital inflow coming in on a short-term basis (even 7 or 10 days), and interest rates were too high because the Central Bank was trying to reduce inflation. He was asked if he were afraid that tomorrow all of this money would go out. So he said: “look, this question is the same as if you go to the opera, and you leave your coat. They have all of these coats there. When you come to ask the person there for your coat, you are not afraid that after the performance somebody has come and taken your coat, and you will remain without any coat. So I say, I am not afraid because all the coats are here. I mean, they are keeping them. I would be afraid if they were selling them during the performance” So what he wanted to say was that all of this money was coming in, and it was basically managed, and kept in the form of reserves. Even when the money turned around and left, it just left. The money was there. Now if you lend this money long-term, if you lend this money through different currencies, or mismanage the whole thing, then obviously there is a problem. I don't know the details of what is the use of all incoming flows in Poland. Basically, it may be problematic if there is short-term debt.

Jacek Tomkiewicz, TIGER: You said that one reason for the Asian crisis was a huge credit creation. Our central bank decided to fight this by keeping a very high interest rate. We, of course, pay for this in lower growth and unemployment. Do you think this was a good choice, or should we have decided on a lower interest rate and concentrated more on regulatory framework and financial supervision?

Mario I. Blejer: I do not know exactly the credit policy of the central bank of Poland. But I can give my opinion. One thing that I see is that the interest rates are high in two senses. They are high in real terms, and they are also high in international terms because the risk spread you are paying is very low. This large difference between the local and the foreign interest rate plus the spread should reflect some sort of risk. Why the central bank has this policy? I believe that is to keep inflation low through monetary policy. The alternative is to change the monetary and fiscal mix. If you have a much larger fiscal surplus then you do not need to have a high interest rate. But reducing the fiscal deficit is not a policy of the central bank. So the problem is what kind of mix of monetary and fiscal policy is being used. But I can not give an opinion, because I do not know enough about the motivation behind the central bank's decision.

Arnaud Fouillet, France: I have a second question. It concerns your frame of analysis of the conflict between macroeconomics and financial management. I would like to know if this frame of analysis is true for developed countries and how you would analyze the situation in the U.S.?

Mario I. Blejer: I have to be clear that it is the same framework of analysis. That in fact, you need to pay much more attention to financial variables in analyzing macroeconomic development. At a given time, it was called a black box, or the neglected dimension of macroeconomic policies. Macroeconomic policy stated that you could change exchange rates, change the fiscal deficit and credit policies. All of that went into some sort of black box, and out came some macroeconomic results. The black box was the financial sector. No one cared too much how impulses from fiscal and monetary variables were processed in the black box.

I think that in the last twenty years and particularly in the last ten years a lot of effort has been made to see what is in the black box, particularly in developed economies. As I have said today, what was not given enough attention before the Asian crisis, was the fact that you could have a serious macroeconomic crisis even if an economy's fundamentals seemed to be healthy. This is also true for the developed countries too. This is exactly what happened in some of the Nordic countries as well. For example, it happened in Finland and in Sweden with its banking crisis etc. It became very clear that you could have a macroeconomic crisis if you have a problem with the financial sector, even if all the macroeconomic variables seem to be fine. It became apparent that this black box does not always work automatically. Even if all of these variables were fine it was not understood what was happening in this black box, and you would end up with a crisis. I think this is true for developed countries as well.

I can not tell you too much about the situation in the U. S. The situation in the U.S. is a very big discussion today. The question is if there has there been a change in productivity caused by the new economy? The fact is that there is now more technology. There has been a change in productivity above what historical levels have been. Can the economy grow at higher rates than before or not? The current slump, according to many observers is a temporary one. But I do not know, because there is a discussion on this issue now. The economy in the U.S. is in financial balance. In the 1980's there was a number of crises, inflation spread and so on. So now there is financial balance. The issue is that the stockmarket reached very high levels, and started to fall in an organized, ordered way not as in a crash. This is changing, of course, the way consumers react. The rate of growth has gone down. So the question is if this increase in productivity is cyclical or temporary, or is it a permanent change.

Grzegorz W. Kolodko: By all means the two biggest countries in terms population among the emerging markets in Asia, that is, China and India, were able to avoid this sort of crisis. There was a time when the Chinese approach and the Chinese reaction in the aftermath of the contagion was rather praised by the IMF. They did not devalue later in 1997, or in 1999. But on the other hand, these two big economies, China and India, have hardly followed the so-to-say IMF orthodoxy. They have neither been open for the free flow of capital, neither have they floated their exchange rates. So this policy is not 100% music to the ears of the IMF mainstream. How would you evaluate, from today's perspective, the way these two big emerging markets have handled the risk of contagion? My second question is also set against this background. Would you say that there is a new emerging orthodoxy or wisdom of the

IMF on this issue? Sometime ago there was a stronger insistence, or advice, or persuasion to fix the exchange rate, to execute the policy of nominal anchor or some sort of package. Now, rather, there is the advice or insistence to float the exchange rate, to make it more flexible. Within this context, what is the current IMF position vis-à-vis capital flow control? Sometime ago when I was working for the IMF, we discussed these issues pretty often. It was said that we were not against capital controls. The only problem is that we are not able to impose any sensible system of capital controls. So it is better to leave it as it is and only take care of sound macroeconomic fundamentals, and prudential supervision of the financial sector instead of imposing any sort of capital flow control. Do you think this liberal deregulation will be the pattern in the foreseeable future? Or will there be some sort of coordination on the global scale under the supervision or tutelage of the IMF vis-à-vis the capital controls, and if so then by what means?

Mario I. Blejer: The first question was about India and China. They were not so much affected by the crisis. They were affected, though. The rate of growth of the economies decelerated, but they were not subject to the same effects. The real issue of these two countries (though it is also different in India and China) is that the level and the importance of the financial sector in these economies are different. It is much lower than in other Asian countries. You can not compare the role of the financial sector in China with the role of the financial sector in Korea - it is of a different magnitude. At the same time, the second issue is that in India eighty per cent of the financial sector is still government owned. In China probably all of it is government owned. China has the largest stockmarket in Asia after Japan. But in terms of financial markets, and other financial institutions, they are very controlled. So in principle, I would think, that the contagion was very much contained because there was not so much ability for the financial sector to create these imbalances. I mentioned in one of the figures very clearly that the contagion really affected countries that had banking problems. That was the characteristic of the contagion. China and India did not have such banking problems because the banking sectors were not so developed and they were basically contained by the level of the government's control. The second reason is that both India and China had very high level of reserves. Korea also had, at some point, high levels of reserves. But most of the countries affected by the crisis did not have high levels of reserves. They had reserves, but they were all mortgaged, either sold or unusable. So China and India had very strong defenses. Now one thing about the exchange rates. If you are going to have a fixed exchange rate or if you are going to have a floating rate (but you do not want it to float too much, you want to control it) you'd better have large amounts of reserves. So, accumulate reverses first, and they defend the exchange rate as much as you can. That would be one of the most interesting things today: you can not fix exchange rate regimes if you do not have the ability to defend it in case of changes in the mood in the financial markets. However, the Fund has no position on exchange rates. They have members with both fixed and floating exchange rates. The Fund does not come to a country and say: "well you are doing fine, your exchange rate is consistent with all of your other policies, the financial sector is doing fine, trade-wise you are okay, employment is fine - but we do not like your exchange rate regime". It never happens. We will not criticize an exchange rate regime because we do not like it. The question is if the exchange rate regime that exists at a given point in a given country is consistent with the rest of the country's policies. For example, in Malaysia they have a fixed exchange rate. So we told them to either keep their policies consistent with the exchange rate or let the exchange rate float. It is either one or two. You can not have inconsistencies. Malaysia is doing fine now since they have consistent policies now. But the issue is how to tell if the Malaysian economic policies are consistent with the exchange rate or should the exchange rate be allowed to float. But there is no policy of the Board of the IMF regarding what is the exchange rate regime that should prevail. It is not like in the 1950's and 60's, when there was a fixed exchange rate regime, and if you wanted to devalue it then you needed permission. It is not that extreme. I personally think that it is not a very good idea to use the foreign exchange rate as a policy instrument to obtain results. The exchange rate is not available for that. The exchange rate should balance financial flows within and outside the country. But I think that if you are going to have an exchange rate that is fixed you should have the monetary and fiscal policy that is consistent with it. If you are going to let it float, you have to let it float, and have enough reserves to avoid dramatic changes. I think that is the correct thing.